

Appl. No. 09/183,380
Amdt. dated September 29, 2004
Reply to Official Action dated July 9, 2004

Amendments to the Claims

1. (Cancelled)

2. (Currently Amended) A wire-bound telecommunication device as claimed in claim 5, ~~claimed in claim 1~~, wherein
the signal energy is determined cyclically.

3. (Currently Amended) A wire-bound telecommunication device as claimed in claim 5, ~~claimed in claim 1~~ wherein
the signal energy determination is initiated by a trigger pulse.

4. (Cancelled)

5. (Currently Amended) A wire-bound telecommunication device comprising:
terminals for coupling the device to a subscriber line of a telecommunication network,
a transmission circuit, and
a signal energy detecting arrangement that is configured to determine a time domain signal representing signal energy of a substantial entirety of the signal on the subscriber line in a predetermined time interval,
wherein the signal energy detecting arrangement comprises,
a first comparator, the first comparator comparing the signal on the subscriber line with an amplitude reference signal, and generating a signal at a first comparator output;
an integrator; the integrator integrating the signal at the first comparator output at the predetermined time interval and generating an integrated output; and
a second comparator, the second comparator comparing the integrated output with an energy reference signal, and generating a control signal at a second comparator output;
wherein the telecommunication device operates according to a given signal

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protocol, the signal energy being determined during at least one predetermined expected signal interval; and

~~A wire-bound telecommunication device as claimed in claim 4,~~

wherein the signal protocol is a caller identification signal protocol and the expected signal interval comprises a tone alerting signal.

6. (Original) A wire-bound telecommunication device as claimed in claim 5, wherein the signal energy determination is continued until a further expected signal interval comprising a caller identification signal.

7. (Original) A wire-bound telecommunication device as claimed in claim 6, wherein a caller identification signal detector is initiated by an initiating pulse which is generated a predetermined time after the detection of the tone alerting.

8. (Original) A wire-bound telecommunication device as claimed in claim 7, wherein the initiation pulse controls switching of an impedance parallel to the subscriber line.

9. (Currently Amended) A wire-bound telecommunication device as claimed in claim 5, ~~claimed in claim 1~~ wherein the energy determination is used for monitoring subscriber line load variations.

10. (Cancelled)

11. (Cancelled)

12. (Currently Amended) A wire-bound telecommunication device as claimed in claim 13, ~~claimed in claim 11,~~ wherein the signal energy is determined cyclically.

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13. (*Currently Amended*) A wire-bound telecommunication device as claimed in claim 15, claimed in claim 11, wherein

the signal energy determination is initiated by a trigger pulse.

14. (*Cancelled*).

15. (*Currently Amended*) A wire-bound telecommunication device comprising:
terminals for coupling the device to a subscriber line of a telecommunication network,

a transmission circuit, and

a signal energy detecting arrangement that is configured to determine a time domain signal representing signal energy of a substantial entirety of the signal on the subscriber line in a predetermined time interval,

wherein the signal energy detecting arrangement comprises,

an analog-to-digital converter, having an A/D output, and an A/D input coupled to the subscriber line of a telecommunications network,

a comparator/counter, having an input coupled to the A/D output, the comparator/counter configured as an amplitude detector, the comparator/counter comparing the signal on the subscriber line with an amplitude reference signal and an energy reference signal at the predetermined time interval, generating data at a comparator/counter output; and

a register, configured to store the data from the comparator/counter output, the register having an output databus;

wherein the telecommunication device operates according to a given signal protocol, the signal energy being determined during at least one predetermined expected signal interval; and

A wire-bound telecommunication device as claimed in claim 14,

wherein the signal protocol is a caller identification signal protocol and the expected signal interval comprises a tone alerting signal.

16. (*Previously Presented*) A wire-bound telecommunication device as claimed in claim

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15, wherein

the signal energy determination is continued until a further expected signal interval comprising a caller identification signal.

17. *(Previously Presented)* A wire-bound telecommunication device as claimed in claim 16, wherein,

a caller identification signal detector is initiated by an initiating pulse which is generated a predetermined time after the detection of the tone alerting.

18. *(Previously Presented)* A wire-bound telecommunication device as claimed in claim 17, wherein

the initiation pulse controls switching of an impedance parallel to the subscriber line.

19. *(Currently Amended)* A wire-bound telecommunication device as claimed in claim 15, ~~claimed in claim 11~~, wherein

the energy determination is used for monitoring subscriber line load variations.